AMENDMENT TO THE CLAIMS

1. (cancelled).

2. (Currently Amended) The load cell body of ~~claim 1 and~~ claim 4 and further comprising sensors mounted on selected tubes.

3. (Previously Presented) The load cell body of claim 2 wherein the sensors comprise shear sensors and axial tension/compression sensors mounted to each tube.

4. (Original) A load cell body for transmitting forces and moments in a plurality of directions, the load cell body comprising:

an integral assembly having:

a first ring member and a second ring member, each ring member having a central aperture centered on a reference axis;

at least three tubes extending from the first ring member to the second ring member parallel to the reference axis; and

wherein the first ring member includes an aperture aligned with an opening to a bore in each of the tubes.

5. (Original) The load cell body of claim 4 wherein the second ring member includes an aperture aligned with an opening to each bore of the tubes.

6. (Currently Amended) The load cell body of ~~claim 1 and~~ claim 4 and further comprising:

a mounting hub including a first annular rim joined to the first ring member, a second annular rim including a plurality of bores extending there through and a cylindrical support extending between the first annular rim and the second annular rim.

7. (Currently Amended) The load cell body ~~of claim 1~~ of claim 4 wherein an outer surface of each tube is non-rectangular.

8. (Original) The load cell body of claim 2 wherein an outer surface of each tube includes a plurality of opposed surfaces and wherein the sensors are mounted to the opposed surfaces.

9. (Original) The load cell body of claim 8 wherein the outer surface comprises a first pair of surfaces facing in opposite directions and a second set of surfaces facing in opposite directions, the second set of surfaces being substantially orthogonal to the first set of surfaces such that the surfaces of the first set and the second set are alternately disposed about each corresponding longitudinal axis and wherein the sensors are mounted to the surfaces of the first and second sets of surfaces.

10. (Original) The load cell body of claim 9 wherein eight tubes join the first ring member to the second ring member, and wherein opposed surfaces of adjacent pairs of tubes are aligned such that the first pair of opposed surfaces face the same direction and the second pair of opposed surfaces face the same direction.

11. (Original) The load cell body of claim 10 wherein each of the opposed surfaces is planar.

12. (Original) The load cell body of claim 10 wherein the outer surfaces of each tube form an octagon.

13. (Currently Amended) The load cell body of claim 10 wherein the sensors comprise a ~~first~~ set of shear sensors ~~are~~ mounted on the first set of opposed surfaces comprising a ~~first~~ shear sensing circuit for each tube, and a ~~second~~ set of axial tension/compression sensors ~~are~~ mounted on the second set of opposed surfaces comprising a ~~second~~ axial tension/compression sensing circuit for each tube.

14. (Currently Amended) The load cell body of claim 13 wherein the ~~first~~ shear sensing circuits of each of said adjacent ~~pair~~ pairs of tubes are electrically coupled to provide an output signal, and wherein the ~~second~~ axial tension/compression sensing circuits of each of said adjacent ~~pair~~ pairs of tubes are electrically coupled to provide an output signal.

15. (Original) The load cell body of claim 4 wherein at least some of the apertures in the first ring member aligned with the bores include mounting threads.

16. (Original) The load cell body of claim 5 wherein at least some of the apertures in the first and second ring members aligned with the bores include mounting threads.

17. (Currently Amended) A load cell body for transmitting forces and moments in a plurality of directions, the load cell body comprising:

an integral assembly having:

a first ring member and a second ring member, each ring member having a central aperture centered on a reference axis; and

at least three tubes extending from the first ring member to the second ring member parallel to the reference axis; ~~and~~

an inner cylindrical wall plate joined to at least one of the first and second ring members; and

an outer cylindrical wall plate joined to at least one of the first and second ring members, wherein the plurality of tubes are disposed between the inner and outer cylindrical wall plates.

18. (Original) The load cell body of claim 17 wherein inner and outer cylindrical wall plates are joined to the first and second ring members to form a sealed chamber.

19. (Previously Presented) A load cell body for transmitting forces and moments in a plurality of directions, the load cell body comprising:

an integral assembly having:

a first ring member and a second ring member, each ring member having a central aperture centered on a reference axis; and

at least three tubes extending from the first ring member to the second ring member parallel to the reference axis; and

an overtravel limit assembly extending within a bore of a tube.

20. (Original) The load cell body of claim 19 wherein the overtravel limit assembly comprises a first extension joined to the first ring member and a second extension joined to the second ring member, a coupling device selectively coupling the first and second extension members to limit displacement of the first extension from the second extension.

21. (Original) The load cell body of claim 20 wherein the first extension member and the first ring member include mating threads and the second extension member and the second ring member include mating threads.

22. (Original) The load cell body of claim 21 wherein the first and second extension members each include central recesses with inner threads.

23. (Previously Presented) The load cell body of claim 2 wherein the sensors comprise bending sensors.

24. (Cancelled)

25. (Cancelled)

26. (Cancelled)

27. (Cancelled)

28. (New) The load cell body of claim 17 and further comprising sensors mounted on selected tubes.

29. (New) The load cell body of claim 28 wherein the sensors comprise shear sensors and axial tension/compression sensors mounted to each tube.

30. (New) The load cell body of claim 28 wherein an outer surface of each tube includes a plurality of opposed surfaces and wherein the sensors are mounted to the opposed surfaces.

31. (New) The load cell body of claim 30 wherein the outer surface comprises a first pair of surfaces facing in opposite directions and a second set of surfaces facing in opposite directions, the second set of surfaces being substantially orthogonal to the first set of surfaces such that the surfaces of the first set and the second set are alternately disposed about each corresponding longitudinal axis and wherein the sensors are mounted to the surfaces of the first and second sets of surfaces.

32. (New) The load cell body of claim 31 wherein eight tubes join the first ring member to the second ring member, and wherein opposed surfaces of adjacent pairs of tubes are aligned such that the first pair of opposed surfaces face the same direction and the second pair of opposed surfaces face the same direction.